**DBMS ASSIGNMENT 6**

**Q1.** **Create customers table and have records:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | NAME | AGE | ADDRESS | SALARY |
| 1 | Ramesh | 23 | Allahabad | 20000 |
| 2 | Suresh | 22 | Kanpur | 22000 |
| 3 | Mahesh | 24 | Gaziabad | 24000 |
| 4 | Chandan | 25 | Noida | 26000 |
| 5 | Alex | 21 | Gurgaon | 28000 |
| 6 | Sunita | 20 | Delhi | 30000 |

**Write a program to retrieve the customer name and address using explicit cursor.**

**Q2. Write a program to create a row level trigger for the CUSTOMERS table(above) that would fire for INSERT or UPDATE or DELETE operations performed on the CUSTOMERS table. This trigger will display the salary difference between the old values and new values:**

**Q3. Write a PL/SQL function which will compute and return the maximum of two values.**

**Answer-1**

**SQL> create table cust(id number(2) primary key not null,name varchar2(10),age**

**umber(3),address varchar2(15),salary number(7));**

**SQL> insert into cust values(1,'ramesh',23,'allahabad',20000);**

**SQL> insert into cust values(2,'suresh',22,'kanpur',22000);**

**SQL> insert into cust values(3,'mahesh',24,'gaziabad',24000);**

**SQL> insert into cust values(4,'chandan',25,'noida',26000);**

**SQL> insert into cust values(5,'alex',21,'gurgaon',28000);**

**SQL> insert into cust values(6,'sunita',20,'delhi',30000);**

**Declare**

**Cursor c\_cust IS select name,address from cust;**

**Cust\_name cust.name%type;**

**Cust\_address cust.address%type;**

**BEGIN**

**OPEN c\_cust;**

**If c\_cust % ISOPEN then**

**Loop**

**Fetch c\_cust INTO cust\_name,cust\_address;**

**Dbms\_output.put\_line('employee fetched: '||cust\_name||' '||cust\_address);**

**Exit when c\_cust % NOTFOUND;**

**End loop;**

**End if;**

**Commit;**

**Close c\_cust;**

**End;**

**/**

**Answer-2**

CREATE OR REPLACE TRIGGER salary\_changes

BEFORE DELETE OR INSERT OR UPDATE ON cust

FOR EACH ROW

WHEN (NEW.ID > 0)

DECLARE

   sal\_diff number;

BEGIN

   sal\_diff := :NEW.salary  - :OLD.salary;

   dbms\_output.put\_line('Old salary: ' || :OLD.salary);

   dbms\_output.put\_line('New salary: ' || :NEW.salary);

   dbms\_output.put\_line('Salary difference: ' || sal\_diff);

END;

/

SQL> update cust set salary=25000 where id=1;

Old salary: 20000

New salary: 25000

Salary difference: 5000

SQL> insert into cust values(7,'nidhi',28,'faridabad',29000);

Old salary:

New salary: 29000

Salary difference:

SQL> delete from cust where id=4;

**Answer-3**

create function findmax(n1 in number,n2 in number)

return number

IS

max\_value number;

BEGIN

if n1>n2 then

max\_value:=n1;

else

max\_value:=n2;

end if;

return max\_value;

end;

/

declare

a number;

b number;

max\_value number;

BEGIN

a:=&a;

b:=&b;

max\_value:=findmax(a,b);

dbms\_output.put\_line('maximum value is ' || max\_value);

END;

/